AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-60. (cancelled):

61. (new): A method for the preparation of microparticles from a liquid one-phase system containing biological material and at least two compounds being incompatible in aqueous solution, wherein the formation of the microparticles is achieved by evaporation of water from the one-phase system leading to a phase separation with a dispersed phase and a continuous phase.

62. (new): A method according to claim 61, wherein said evaporating process has a duration between 0.1 and 100 hours.

63. (new): A method according to claim 61, wherein said evaporating process has a duration between 0.1 and 50 hours.

64. (new): A method according to claim 61, wherein said evaporating process is carried out at a temperature between 0 °C and 100 °C.

65. (new): A method according to claim 61, wherein said evaporating process is carried out at a temperature between 0 °C and 50 °C.

66. (new): A method according to claim 61, wherein said evaporating process is carried out under a pressure of 0.1 to 760 mm Hg p.

67. **(new):** A method according to claim 61, wherein said evaporating process is stopped when the water concentration within the system is between 5 to 80 %.

68. **(new):** A method according to claim 61, wherein said evaporating process is stopped when the water concentration within the system is between 5 to 75 %.

69. **(new):** A method according to claim 63, wherein the calcium phosphate precipitation method is used.

70. **(new):** A method according to claim 65, wherein the calcium phosphate precipitation method is used.

71. **(new):** A method according to claim 67, wherein the calcium phosphate precipitation is used.

72. **(new):** A composition to produce particles for delivery of biological material into a target cell comprising:

biological material,

a preparation of an aqueous polymer system on the basis of a mixture with at least two compounds being incompatible in aqueous solutions, said compounds being present in a concentration in water that leads to the spontaneous formation of a dispersed phase by one of said compounds, said dispersed phase including microparticles composed of at least 75 % of said polymer compounds and 25 % or less of said biological material in said aqueous solution.

73. **(new):** A composition according to claim 72, wherein the mixture is a water mixture.

74. **(new):** A composition according to claim 72, wherein first and second compounds are a carbohydrate-based polymers or derivatives thereof.

75. **(new):** A composition according to claim 72, wherein first compound is a carbohydrate-based polymer or a derivative thereof and a second compound is a polyaliphatic alcohol or derivative thereof.

76. **(new):** A composition according to claim 74, wherein the carbohydrate-based polymer is dextran, or dextrin, or a methylcellulose based polymer, or a carboxymethyl cellulose-based polymer, or polydextrose, or chitin, or chitosan, and/or starch, or hetastarch, or Ficoll, or derivatives thereof, or naturally occurring polymers zein, pullulan, or derivatives thereof.

77. **(new):** A composition according to claim 75, wherein the carbohydrate-based polymer is dextran, or dextrin, or a methylcellulose based polymer, or a carboxymethyl cellulose-based polymer, or polydextrose, or chitin, or chitosan, and/or starch, or hetastarch, or Ficoll, or derivatives thereof, or naturally occurring polymers zein, pullulan, or derivatives thereof.

78. **(new):** A composition according to claim 77, wherein one compound is substituted by a nucleic acid-binding agent.

79. **(new):** A composition according to claim 77, wherein one compound is substituted by a nucleic acid-binding agent.

80. (new): A composition according to claim 75, wherein the polyaliphatic alcohol is polyethylene oxide, or a derivative thereof, or polyethylene glycol (PEG), or PEG-acrylate, or polyvinyl acetate, or a derivative thereof.

81. (new): A composition according to claim 80, wherein said polyethyleneglycol has a molecular weight from 3 kDa to 20 kDa.

82. (new): A composition according to claim 72, wherein said composition comprises a surfactant or a derivative thereof.

83. (new): A composition according to claim 82, wherein said surfactant is polyoxyethylene sorbitan and a fatty acid ether (Tween-20, 40, 60, 80).

84. (new): A composition according to claim 72, said composition comprising polyoxyethylene-polyoxypropylene co-polymer.

85. (new): A composition according to claim 84, wherein said polyoxyethylene-polyoxypropylene co-polymer is Pluronic L-64 or Pluronic F-68, or a derivative thereof.

86. (new): A composition according to claim 72, said composition comprising polyvinylpyrrolidone (PVP).

87. (new): A composition according to claim 72, wherein said biological material comprises polynucleotides, or vaccines (microbes, viruses), or proteins, or peptides, or derivatives thereof.

88. (new): A composition according to claim 72, wherein said biological material comprises cytokines or monoclonal antibodies.

89. **(new):** A composition according to claim 88, wherein said cytokines comprise interferones and/or interleukines.

90. **(new):** A composition according to claim 78, wherein said nucleic acid-binding agent is a peptide or a protein.

91. **(new):** A composition according to claim 79, wherein said nucleic acid-binding agent is a peptide or a protein.

92. **(new):** A composition according to claims 90 and 91 wherein said peptide is low molecular weight polylysines or polyethylenimines or derivatives thereof.

93. **(new):** A composition according to claims 90 or 91, wherein said protein is a histone.

94. **(new):** A composition according to claims 76 or 77, wherein said dextran has a molecular weight from 4 kDa to 5000 kDa.

95. **(new):** A composition according to claim 87, wherein said polynucleotide is DNA.

96. **(new):** A composition according to claim 87, wherein said polynucleotide is RNA.

97. **(new):** A composition according to claim 96, wherein said RNA is antisense.

98. **(new):** A composition according to claim 80, wherein said polyethylene glycol has a molecular weight from 1 kDa to 20 kDa.

99. **(new):** Microparticles formed by conducting a method as in any one of claims 61 to 71.

100. (new): Microparticles according to claim 99 being composed of at least 75 % polymer molecules and 25 % or less biological material.